

AMENDMENTS TO THE CLAIMS

Listing of the claims:

Following is a listing of all claims in the present application, which listing supersedes all previously presented claims:

1. (Canceled)
2. (Previously Presented) The image processing circuit according to claim 7, wherein said color sensitivity correction circuit further comprises a first offset table where said first offset is stored, and a second offset table where said second offset is stored, and the first and second offsets which are output from said first and second offset tables are added to or subtracted from said pixel signals.
3. (Withdrawn) The image processing circuit according to claim 7 4, wherein said color sensitivity correction circuit further comprises an offset table having an offset combining said first offset and second offset, and the offset which is output from said offset table is added to or subtracted from said pixel signals.
4. (Withdrawn) The image processing circuit according to claim 7 4, wherein said color sensitivity correction circuit further comprises an offset adjustment section for adjusting said second offset according to brightness of at least one frame of an image.
5. (Withdrawn) The image processing circuit according to claim 4, wherein said offset adjustment section adjusts the second offset to be larger when the image

has a higher brightness, and adjusts the second offset to be smaller when the image has a lower brightness.

6. (Withdrawn) The image processing circuit according to claim 4, wherein said offset adjustment section adjusts said second offset to be larger when a gain of said amplifier is smaller, and adjusts said second offset to be smaller when the gain of said amplifier is larger, according to the gain of the amplifier which amplifies said image signals corresponding to at least one frame of an image.

7. (Currently Amended) An image processing circuit, comprising:
a color sensitivity correction circuit which adds or subtracts a predetermined offset to or from a pixel signal obtained, for each column, by amplifying photoelectric conversion signals of pixels, and multiplies a the result of the addition or subtraction by a predetermined gain, said pixels having a photoelectric conversion element respectively and being arranged in column and row directions,

wherein said predetermined offset includes a first offset, which is set according to each color, and a second offset, which is set according to a plurality of columns, and

wherein said color sensitivity correction circuit comprises an offset generation section, which compares pixel signals for each column with a reference value corresponding to brightness of at least one frame of an image, and dynamically generates the second offset according to the result of the comparison, and updates the dynamically generated second offset as the second offset.

8. (Original) The image processing circuit according to claim 7, wherein said reference value is determined based on a gain of an amplifier for amplifying said image signals corresponding to at least one frame of an image.

9. (Currently Amended) An image processing circuit, comprising:
a correction circuit for or adding or subtracting an offset for each column, which is set according to a plurality of columns, to or from pixel signals obtained for each column by amplifying photoelectric conversion signals of pixels, said pixels having photoelectric conversion elements and being arranged in column and row directions,
wherein said correction circuit ~~further~~ comprises an offset generation section which compares the pixel signals for each column with a reference value corresponding to brightness of at least one frame of an image, ~~and~~ generates said offset for each column dynamically according to the result of the comparison, and updates the dynamically generated offset for each column as the offset for each column.

10. (Currently Amended) The image processing circuit according to claim 9, wherein said correction circuit adds or subtracts an offset for each color, which is set for each color, to or from said pixel signals, and multiplies ~~a~~ the result of the addition or subtraction by a gain which is set for each color.

11. (Currently Amended) The image processing circuit according to claim 9, wherein said correction circuit further comprises an offset table for storing the offset for each column, and said correction circuit adds or subtracts the offset for each column

which is output from said offset table to or from said pixel signals and stores the dynamically generated offset in said offset table for said updating.

12. (Withdrawn) The image sensor according to claim 11, wherein said correction circuit further comprises an offset adjustment section for adjusting said offset for each column according to brightness of at least one frame of an image.

13. (Canceled)

14. (Withdrawn) The image processing circuit according to claim 12, wherein said offset adjustment section adjusts said offset for each column based on a gain of an amplifier for amplifying said image signals corresponding to at least one frame of an image.

15. (Currently Amended) The image processing circuit according to claim 9, wherein said reference value is determined based on a gain of an amplifier for amplifying said image signals corresponding to at least one frame of an image.

16. (Previously Presented) A color image sensor, comprising:
the image processing circuit according to any one of claims 2, 9-11 and 15;
a pixel array where said pixels are arranged in column and row directions; and

a column output circuit which is disposed for each column, amplifies the photoelectric conversion signals of said pixels arranged in the column direction; and outputs said image signals.